



Weather Briefings To Enhance Decision Making

Me: Corey Pieper - SRH

Cammye Sims Mark A. Fox







Discuss traditional University and NWS training

Look at a pyramid approach for effective weather briefings







Meteorology is an exact science.







Meteorology is an exact science.







 Only questions that can be answered with 100% confidence or skill should be answered.





First, A Reality Check

 Only questions that can be answered with 100% confidence or skill should be answered.







 National Weather Service routine forecasts are more important than watches, warnings, or advisories.





First, A Reality Check

 National Weather Service routine forecasts are more important than watches, warnings, or advisories.





Forecaster Training

- University training deals with science.
- New forecaster training usually deals with the routine products / services
 - Exception is for RADAR operations
- New hire training deals with observing systems
- Common thread is routine operations



Something's Missing



- NWS does not teach:
 - How to talk with partners
 - To ensure understanding of scientific information
 - What is important to partners
 - How NWS information is used to make decisions
 - The role of weather information in public safety
 - Informative ways to convey uncertainty







 How do professional scientists communicate the data that our customers *need,* in a way that is *easily* understood?









- The Human Body
- Consider This:
 - The sleet will begin about 1 o'clock.
 - The sleet will begin about 1 o'clock.
 - Do you see the difference?
 - Did you hear the difference?
- Even if you're right...will you develop trust with a presentation lacking confidence?





Step 1:

- Jerry Seinfeld: Introduction to SeinLanguage:
 - "This book is filled with funny ideas but you have to provide the delivery. So when you read it, remember -- timing, inflection, attitude. That's comedy. I've done my part, the performance is up

to you."









- Has been done for years...not always well.
 - Scientists tend to talk to other scientists, even if one isn't around.
- Bridge the gap between data and information
 - We have the data
 - They need the information
- Allows decisions to be made
 - Based on what we think will happen



Effective Weather Briefings:



- Know your audience (ICS is a good start)
- Know how they make decisions
 - And when the have to make them
- Determine the key pieces of information within the weather forecast
- Determine the most likely solution
 - Explore likely scenarios during Q&A
 - Convey the uncertainty





NWS Core Value of Service

- •Know your audience:
 - •Helps you **adapt briefing** to, and even **anticipate** the customer's specific needs
 - •Thresholds for aviation? Plume dispersion? Probabilistic vs. Deterministic?
 - Know their terminology
 - Easier on long assignments.
 - •For short-term assignments: office education is the key
 - ·ICS

Know	Your
Audie	ence

Know What
Decisions Need
to be Made
and When

Keep it Short.
Use Historical
Analogs when
Possible

Know Your Subject (Meteorology)





NWS Core Value of Service

- •Keep it short:
 - Historical analogs important even if history is yesterday
 - •"Why", is not important ("What", "When", and "Where", is)
 - "What will the high be tomorrow?", should not take 3 minutes to answer
 - •Telephone game?
- Know your subject...

Know Your
Audience

Know What
Decisions Need
to be Made
and When

Keep it Short.
Use Historical
Analogs when
Possible

Know Your
Subject
(Meteorology)



Fundamentals of Communication



Curveball!

Ensure Your

Message can be
Understood
Without Graphics

Be Prepared for Curveball Questions

Use Graphics
Only If They
Facilitate
Understanding

Know Your Audience Know What
Decisions Need
to be Made
and When

Keep it Short.
Use Historical
Analogs when
Possible

Know Your Subject







Present Forecast in Terms of What You Expect To Happen Present Potential
Outcomes That
Will Assist
Decision Making

Ensure Your
Message can be
Understood
Without Graphics

Be Prepared for Curveball Questions

Use Graphics
Only If They
Facilitate
Understanding

Know Your Audience Know What
Decisions Need
to be Made
and When

Keep it Short.
Use Historical
Analogs when
Possible

Know Your Subject





Confidence in Forecast

Create
Confidence in the
Forecast

Present Forecast in Terms of What You Expect To Happen Present Potential
Outcomes That
Will Assist
Decision Making

Ensure Your
Message can be
Understood
Without Graphics

Be Prepared for Curveball Questions

Use Graphics
Only If They
Facilitate
Understanding

Know Your Audience Know What
Decisions Need
to be Made
And When

Keep it Short.
Use Historical
Analogs when
Possible

Know Your Subject





Summary - I

- Direct communication (Weather Briefings) is among the best ways to share important information with our customers/partners
- A verbalized forecast is an effective tool:
 - Conveys confidence in forecast (or not)
 - A confident statement of no confidence is helpful and leads to better decisions







- Know your subject Know your audience
- Keep in mind that your briefing leads to decisions.
 - Partners understand unpredictability
 - A partner's plan begins with what you think



Thanks!!



- Corey Pieper
- corey.pieper@noaa.gov
- (817) 978-1100 x 122